

RESPONSE

Claims 1-13 are pending in this case. Claims 1 and 9 have been rejected under 35 USC 103(a) as being unpatentable over Mills in view of Long, Jr. et al. Claims 2-8 and 10-13 have been rejected under 35 USC 103(a) as being unpatentable over Mills in view of Long et al. and further in view of various combinations with Turner et al., Gallaway, Kuehn III et al.

Applicant respectfully traverses the rejection of independent Claims 1 and 9 as unpatentable over Mills in view of Long et al. The action states that Mills teaches most of the limitations of the claim, but it does not teach a pneumatic clutch, and further states that Long, Jr. et al. teach an air clutch. The rejection concludes that it would be obvious to select the clutch taught by Long, Jr. because Long, Jr. et al. further teach that the clutch has an advantageously increased life.

It is applicant's position that a person of ordinary skill in the pumping apparatus art would not select a pneumatic clutch based on the teachings of either Mills or Long, Jr. et al. First, the sole mention in Mills about a clutch is the following sentence at Col. 7, linrd 6-9, referenced by the action:

The apparatus preferably is provided with 12 volts at S so the battery of an internal combustion engine can be used as a power source with the contacts of solenoids 42 and 43 being utilized to disengage a clutch means or to interrupt the ignition circuitry of the engine.

There is no suggestion of any problem with the life of a clutch or as to the type of clutch that might be selected.

Long, Jr. does state at Col. 1, lines 401-44 that "positive disconnection will typically improve the life of the clutch inasmuch as reduced scrubbing and sliding of the clutch elements against one another during idle and thus reduce both the generation of frictional heat and consequently overall operating temperatures." But the pneumatic operation of the clutch is taught to be conventional (Col. 4, lines 7-9: "The mounting assemblies 76 cooperate with the air bladder 64 to provide bi-directional axial translation of the ribbed pressure plate 70 in a conventional manner . . ."). The improved reduction in scrubbing and sliding of the clutch elements is provided by the array of helical splines, not the pneumatic bladder: "The arrays of helical splines 90 and 94 and 108 and 110 now cooperate to fully separate and substantially eliminate drag by

axially displacing the first friction disk 92 and the movable clutch plate 106 in response to small inertial and frictional forces." (Col. 5, lines 26-30).

To be a proper suggestion for a pneumatic clutch to combine with Mills on the basis stated in the rejection, Long, Jr. et al. would have to first show some advantage from the use of a pneumatic clutch. But there is no suggestion by Long, Jr. et al. that the pneumatic aspect of the clutch provides the benefits noted by Long, Jr. et al. That is, given the teachings of Mills, one might look to Long, Jr. et al. for its benefits of long life only after a pneumatic clutch had been selected for some reason not shown or suggested by either Mills or Long, Jr.

Thus, neither of the references shows or suggests that a pneumatic clutch has any beneficial application to a well pumping assembly. The only suggestion for combining a pneumatic clutch with a well pumping assembly is applicant's specification, but references may not be combined based on applicant's suggestion. This is impermissible hindsight.

The Examiner is respectfully requested to allow Claims 1-13 and to pass this case to issue.

Applicant's attorney would be pleased to discuss any of the issues herein with the Examiner if the Examiner believes such a discussion would assist in placing this case in condition for allowance.

Respectfully submitted,



Ray G. Wilson
Attorney for Applicants
Registration No. 28,351
Phone (505) 665-3112

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